



IFW /

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Daryoosh Vakhshoori et al.  
Serial No.: 10/632,779  
Filing Date: 08/01/2003  
Title: SYSTEM FOR AMPLIFYING OPTICAL SIGNALS  
Group Art Unit: 2883  
Examiner: Ryan A. Lepisto  
Attorney's Docket No.: AHURA-1

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED  
WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL,  
POSTAGE PREPAID, IN AN ENVELOPE ADDRESSED TO: COMMISSIONER  
FOR PATENTS, PO BOX 1450, ALEXANDRIA, VA 22313-1450, ON:

April 12, 2006

(DATE OF DEPOSIT)

Mail Stop Amendment  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Margaret M. Slezak

(NAME OF ATTORNEY)

(SIGNATURE)

April 12, 2006

(DATE OF SIGNATURE)

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR 1.56, 1.97 and 1.98, Applicants hereby submit documents and information which may be considered material to the examination of this application. These documents and information are listed on the accompanying forms.

Copies of documents 1-5, which are listed on the accompanying form, PTO/SB/08A (one page), have not been submitted since submission of copies of U.S. patents and U.S. patent applications is no longer required under 37 CFR 1.98.

Copies of documents 6-21, which are also listed on PTO/SB/08B (two pages) are enclosed herewith.

The enclosed documents may have markings thereon. Applicants are not presently aware of the source of those markings, and no significance is meant to be attached thereto.

Applicants respectfully request that these documents be fully considered by the U.S. Patent and Trademark Office during the examination of this application and printed on any patent which may issue on this application. Applicants also respectfully request that a copy of PTO/SB/08A (one page) and PTO/SB/08B (two pages), submitted

04/18/2006 WASFAW1 00000115 10632779

01 FC:1806

180.00 OP

AHURA-1

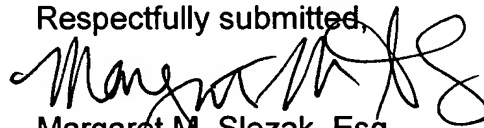
herewith, as considered and initialed by the Examiner, be returned to the undersigned with the next communication.

It is believed that this disclosure complies with the requirements of 37 CFR 1.56, 1.97 and 1.98. If for any reason the Examiner considers otherwise, it is respectfully requested that the undersigned be contacted by the Examiner by telephone in order that any deficiencies may be expeditiously remedied.

A check in the amount of One Hundred Eighty Dollars (\$180.00) payable to the Commissioner of Patents and Trademarks also is enclosed herewith to cover the fee due in connection with this submission. Please charge any additional fees due in connection with this submission, or credit any overpayment, to Deposit Account No. 16-0221. A duplicate copy of this submission is enclosed for the convenience of the Examiner.

Thank you.

Respectfully submitted,



Margaret M. Slezak, Esq.  
Registration No. 55,625  
Pandiscio & Pandiscio, P.C.  
470 Totten Pond Road  
Waltham, MA 02154  
Tel. (617) 290-0060



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/632,779
		Filing Date	08/01/2003
		First Named Inventor	Daryoosh Vakhshoori
		Art Unit	2883
		Examiner Name	Lepisto, Ryan A.
Sheet 2	of 3	Attorney Docket Number AHURA-1	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	6	AGRAWAL et al., Nonlinear Fiber Optics, 1989, Ch.8, Academic Press.	
	7	KOCH et al., Broadband Raman Gain Characterisation in Various Optical Fibers, Electronics Letters, 11/22/2001, 1437-1439, 24.	
	8	TSUKIJI et al., Recent Progress of High Power 14XXnm Pump Lasers, Proceedings of SPIE, 2001, 349-360, 4532, Denver, CO.	
	9	MATSUSHITA et al., Design of Temperature Insensitive Depolarizer for Raman Pump Laser Diode, OSA Technical Digest, OFC2002, WB3.	
	10	FLUDGER et al., Pump to Signal RIN Transfer in Raman Fiber Amplifiers, Journal of Lightwave Technology, 08/2001, 1140-1148, 19-8.	
	11	KIDORF et al., Pump Interactions in a 100-nm Bandwidth Raman Amplifier, IEEE Photonics Technology Letters, May 1999, 530-32, 11-5.	
	12	PAQUETTE et al., Blueshifting of InGaAsP-InP Laser Diodes Using a Low-Energy Ion-Implantation Technique: Comparison Between Strained and Lattice-Matched Quantum-Well Structures, IEEE Journal of Selected Topics in Quantum Electronics, July/August 1998, 741-745, 4-4.	
	13	YU et al., Semiconductor Lasers Using Diffused Quantum-Well Structures, IEEE Journal of Selected Topics in Quantum Electronics, July/August 1998, 723-735, 4-4.	
	14	GARBUZOV et al., 14xx nm DFB InGaAsP/InP pump lasers with 500 mw CW output power for WDM combining, Optical Fiber Communications Conference, 2002, Anaheim, CA.	
	15	CHO, 90 mW CW Superluminescent Output Power from Single-Angled Facet-Ridge Waveguide at 1.5 um, Trends in Optics and Photonics Series, 2001, 31.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

KB/AHURA1.IDS2

AHURA-1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/632,779
		Filing Date	08/01/2003
		First Named Inventor	Daryoosh Vakhshoori
		Art Unit	2883
		Examiner Name	Lepisto, Ryan A.
Sheet 3	of 3	Attorney Docket Number AHURA-1	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	16	OKAMOTO, Fundamentals of Optical Waveguides, 2000, Academic Press, San Diego.	
	17	HOLONYAK, Impurity-Induced Layer Disorder of Quantum-Well Heterostructures: Discovery and Prospects, IEEE Journal of Selected Topics in Quantum Electronics, July/August 1998, 584-594, 4-4.	
	18	KUDO, et al., 1.55-um Wavelength-Selectable Microarray DBF-LD's with Monolithically Integrated MMI Combiner, SOA, and EA-Modulator, IEEE Photonics Technology Letters, March 2000, 242-244, 12-3.	
	19	HAMAMOTO et al., High Power with Low Electric Power Consumption 1.45 um Active Multi-Mode-Interferometer Laser Diode for Fiber Amplifier Applications, Optical Fiber Communications Conference, 2002, Anaheim, CA.	
	20	SOLDANO et al., Optical Multi-Mode Interference Devices Based on Self-Imaging: Principles and Applications, Journal of Lightwave Technology, April 1995, 615-627, 13-4.	
	21	Si et al., Area Selectivity of InGaAsP-InP Multiquantum-Well Intermixing by Impurity-Free Vacancy Diffusion, IEEE Journal of Selected Topics in Quantum Electronics, July/August 1998, 619-623, 4-4.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.